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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,788	08/09/2006	Masaya Muranaka	XA-10628	2773
181 7590 04/24/2009 MILES & STOCKBRIDGE PC 1751 PINNACLE DRIVE SUITE 500 MCLEAN, VA 22102-3833				
EXAMINER				
NGO, CHUONG D				
ART UNIT		PAPER NUMBER		
2193				
NOTIFICATION DATE		DELIVERY MODE		
04/24/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipdocketing@milestockbridge.com  
sstiles@milestockbridge.com

### Office Action Summary

**Application No.**

10/588,788

**Applicant(s)**

MURANAKA, MASAYA

**Examiner**

Chuong D. Ngo

**Art Unit**

2193

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8 is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S5108)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 09/22/06

**DETAILED ACTION**

1. The abstract of the disclosure is objected to because it is not on a separate sheet.

Correction is required. See MPEP § 608.01(b).

2. Claims 1-7 and 9-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 1, the claim is indefinite because it is directed to the method but fails to positively reciting steps defining the claimed method. Claim 7 also has the same problem.

As per claim 2, it is indefinite as to what it means by the recitation "whose first input and output are connected vertically", lines 14-15; claim 9 also has the same problem. Further, "the operation control signal", line 16, lacks a proper antecedent basis.

As per claim 3, lines 5-7, it is unclear the 1-bit random number is generated by a unit circuit or the signal variation detection circuit.

As per claim 4, it is unclear as to what the "output signals serially outputted from the order circuit" and the "output signal preceding by one", lines 4-5, are; claim 11 also has a similar problem. Noting that the order circuit as recited in claim 3 forms an operation control signal, not the serial output signals.

As per claim 6, line 4-5, "the arithmetic method" lacks a proper antecedent basis. Claim 7 also has the same problem.

As per claim 10, line 7, "the output unit" lacks a proper antecedent basis.

As per claim 11, lines 4-5, "the order circuit" lacks a proper antecedent basis.

As per claim 12, line 6, "the next stage" lacks a proper antecedent basis, and is indefinite as to what it is.

As per claim 13, it is indefinite as to whose "the output", line 9, is. Further, it is also indefinite as to what "the logic gate circuit constituting the first logic circuit and the second logic circuit", lines 10-12, is.

As per claim 14, "the MOSFET", lines 3 and 5, lack proper antecedent basis and is unclear as to what it is.

As per claim 15, lines 6-9, it is unclear as to what it means by the recitation " for counting the number of unit circuits forming different outputs among the output signals outputted a plurality of times from the same unit circuit".

3. Claim 8 is allowed.
4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuong D. Ngo whose telephone number is (571) 272-3731. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis, Jr. A. Bullock can be reached on (571) 272-3759. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chuong D Ngo/  
Primary Examiner, Art Unit 2193

05/21/2009